

# Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB)

Recombinant Antibody Catalog # APR10766

# **Specification**

# Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB) - Product Information

Application
Primary Accession
Reactivity
Clonality
Isotype

Calculated MW

FC, Kinetics, Animal Model

Q13705

Rat, Human, Mouse

**Monoclonal** 

IqG1

144.42 KDa

# Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB) - Additional Information

Target/Specificity ACVR2B

**Endotoxin** 

< 0.001EU/ μg, determined by LAL method.

**Conjugation** Unconjugated

**Expression system** 

CHO Cell

#### **Format**

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB) - Protein Information

#### Name ACVR2B

## **Function**

Transmembrane serine/threonine kinase activin type-2 receptor forming an activin receptor complex with activin type-1 serine/threonine kinase receptors (ACVR1, ACVR1B or ACVR1c). Transduces the activin signal from the cell surface to the cytoplasm and is thus regulating many physiological and pathological processes including neuronal differentiation and neuronal survival, hair follicle development and cycling, FSH production by the pituitary gland, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. Activin is also thought to have a paracrine or autocrine role in follicular development in the ovary. Within the receptor complex, the type-2 receptors act as a primary activin receptors (binds activin-A/INHBA, activin-B/INHBB as well as inhibin- A/INHA-INHBA). The type-1 receptors like ACVR1B act as downstream transducers of activin signals. Activin binds to type-2 receptor at the plasma membrane and activates its serine-threonine kinase. The activated receptor type-2 then



phosphorylates and activates the type-1 receptor. Once activated, the type-1 receptor binds and phosphorylates the SMAD proteins SMAD2 and SMAD3, on serine residues of the C-terminal tail. Soon after their association with the activin receptor and subsequent phosphorylation, SMAD2 and SMAD3 are released into the cytoplasm where they interact with the common partner SMAD4. This SMAD complex translocates into the nucleus where it mediates activin-induced transcription. Inhibitory SMAD7, which is recruited to ACVR1B through FKBP1A, can prevent the association of SMAD2 and SMAD3 with the activin receptor complex, thereby blocking the activin signal. Activin signal transduction is also antagonized by the binding to the receptor of inhibin-B via the IGSF1 inhibin coreceptor.

#### **Cellular Location**

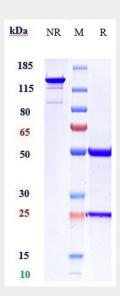
Cell membrane; Single-pass type I membrane protein

## Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB) - Protocols

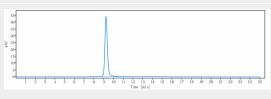
Provided below are standard protocols that you may find useful for product applications.

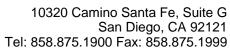
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB) - Images



Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%







The purity of Anti-ACVR2B Reference Antibody (Acceleron patent anti-ActRIIB)is more than 95% ,determined by SEC-HPLC.